



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0177; Product Identifier 2017-SW-138-AD;

Amendment 39-19218; AD 2018-05-09]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters. This AD requires inspecting the tail rotor (T/R) flapping hinge link (hinge) and reporting the results. This AD is prompted by a report of a damaged flapping hinge link. The actions of this AD are intended to prevent an unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0177; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for Docket Operations (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html. You may review the referenced service information at the FAA, Office of the Regional Counsel,

Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0177.

FOR FURTHER INFORMATION CONTACT: Martin R. Crane, Aviation Safety Engineer, Regulations & Policy Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email martin.r.crane@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued Emergency AD No. 2017-0232-E, dated November 21, 2017, to correct an unsafe condition for Airbus Helicopters Model AS 332 C, AS 332 C1, AS 332 L, and AS 332 L1 helicopters. The EASA AD was prompted by the in-flight failure of a pin in a hinge attaching the T/R. EASA advises that damage to the hinge on a T/R blade was reported and that an investigation is ongoing to determine the root cause of the damage. EASA further advises that this condition could lead to failure of the hinge, unbalance of the T/R, and detachment of the T/R gearbox and hub with subsequent loss of control of the helicopter. To correct this unsafe condition, the EASA AD requires a one-time inspection of the flapping hinges, and depending on the findings, corrective actions. It also requires reporting the findings and sending any cracked components to Airbus Helicopters to support the investigation.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

Related Service Information Under 1 CFR part 51

We reviewed Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 64.00.43, Revision 0, dated November 21, 2017, for Model AS332-series helicopters.

This service information describes procedures for visually and dye penetrant inspecting the hinges of all five T/Rs.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

AD Requirements

This AD requires, within 25 hours time-in-service (TIS):

- Performing a tactile inspection of each hinge for friction points;
- Measuring for play in the drag plane;
- Measuring the tightening torque of each spindle bolt.
 - If the tightening torque is not within the minimum and maximum torque, dye-penetrant inspecting the spindle bolt for a crack and removing the spindle bolt and hexagonal castellated nut from service;
 - If the tightening torque is within the minimum and maximum torque, inspecting the spindle bolt for corrosion and fretting.
- Inspecting the bearing race inner ring and bearing needles for spalling and replacing the bearing race if there is any spalling;
- Measuring the thickness of each stop washer and removing the stop washer from service if the thickness is less than 1.5 mm (.060 inch); and
- Inspecting the inner ring for brinelling.
 - If there is brinelling deeper than 0.1 mm (.004 inch), repairing the hinge.

- If there is brinelling 0.1 mm (.004 inch) or less, dye-penetrant inspecting the inner ring for a crack.

This AD also requires, within 10 days after the inspection, reporting the results of each inspection and measurement to Airbus Helicopters.

Differences between this AD and the EASA AD

The EASA AD requires compliance within 25 hours TIS or at the next 50 hour inspection of the T/R, whichever is later; this AD requires compliance within 25 hours TIS. The EASA AD requires returning parts to Airbus Helicopters, and this AD does not.

Interim Action

We considered this AD interim action. The inspection reports that are required by this AD will enable Airbus Helicopters to obtain better insight into the cause of the damaged flapping hinge link, and eventually develop final action to address the unsafe condition. Once final action has been identified, we might consider further rulemaking.

Costs of Compliance

We estimate that this AD affects 20 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD. At an average labor rate of \$85 per hour, inspecting 5 T/R hinges will require 8 hours, and required materials cost would be minimal, for a cost per helicopter of \$680 and a cost of \$13,600 to the U.S. fleet. Reporting the inspection findings would require about 30 minutes, for a cost per helicopter of \$43 and a cost of \$860 to the U.S. fleet.

If required, dye-penetrant inspecting the spindle bolt or inner ring would require about 1 hour, and required materials cost would be minimal, for a cost per helicopter of \$85.

If required, replacing a spindle bolt would require about 1 hour, and required parts would cost \$625, for a cost per helicopter of \$710.

If required, replacing the bearing race would require about 1 hour, and required parts would cost \$585, for a cost per helicopter of \$670.

If required, replacing the inner ring would require about 1 hour, and required parts would cost \$1,986, for a cost per helicopter of \$2,071.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting required by this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave., SW, Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to

adoption of this rule because the inspections required by this AD must be accomplished within 25 hours TIS, a relatively short period of time for these helicopters as they are primarily used for offshore operations. Therefore, we find good cause that notice and opportunity for prior public comment are impracticable.

In addition, for the reason stated above, we find that good cause exists for making this amendment effective in less than 30 days.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2018-05-09 **Airbus Helicopters:** Amendment 39-19218; Docket No. FAA-2018-0177; Product Identifier 2017-SW-138-AD.

(a) Applicability

This AD applies to Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as failure of a tail rotor (T/R) flapping hinge link (hinge). This condition could result in unbalance of the T/R, detachment of the T/R gearbox and hub, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 25 hours time-in-service, inspect each T/R hinge as follows:

(i) Point each T/R blade downward and perform a tactile inspection of each hinge for friction points. Record whether there is a friction point.

(ii) Measure play in the drag plane depicted as “J” in Figure 1 of Airbus Helicopters Emergency Alert Service Bulletin No. 64.00.43, Revision 0, dated November 21, 2017 (EASB 64.00.43), and record the measurement.

(iii) Measure the tightening torque of each spindle bolt and record the measurement.

(A) If the tightening torque is less than 564 inch-pounds or more than 955 inch-

pounds, before further flight, dye-penetrant inspect the spindle bolt for a crack and record whether there is a crack. Remove the spindle bolt and the hexagonal castellated nut from service.

(B) If the tightening torque is between 564 inch-pounds and 955 inch-pounds, inspect the spindle bolt for corrosion and fretting and record whether there is corrosion or fretting. If there is corrosion or fretting that cannot be removed by hand with an abrasive pad, before further flight, dye-penetrant inspect the spindle bolt for a crack in areas Z1 and Z2 as depicted in Figure 2 of EASB 64.00.43. If there is a crack, before further flight, record that there is a crack and remove from service the spindle bolt, hexagonal castellated nut, inner ring, stop washers, needle bearings or set of needle bearings, seals, and split washer.

(iv) Remove the inner ring and stop washers.

(v) Inspect the bearing race inner ring and bearing needles for spalling. If there is any spalling, before further flight, record that there is spalling and replace the bearing race.

(vi) Measure the thickness of each stop washer. If the thickness is less than 1.5 mm (.060 inch), before further flight, remove the stop washer from service. Record that the stop washer was removed from service because of thickness.

(vii) Inspect the inner ring for brinelling.

(A) If there is brinelling more than 0.1 mm (.004 inch) in depth, before further flight, record that there is brinelling and repair the hinge.

(B) If there is brinelling 0.1 mm (.004 inch) or less in depth, before further flight, turn the inner ring to position the area with brinelling on the T/R hub pin side. Record the

brinelling and the turning of the inner ring. Dye-penetrant inspect the inner ring for a crack in the area depicted as “Z3” of Figure 3 of EASB 64.00.43. If there is a crack, before further flight, record that there is a crack in the inner ring and remove from service the spindle bolt, hexagonal castellated nut, inner ring, stop washers, needle bearings or set of needle bearings, seals, and split washer.

(2) Within 10 days after the inspection, submit a report of the measurements and findings of the inspection required by paragraph (e)(1) of this AD, as specified in the Appendix of EASB 64.00.43, to support.technical-dyncomp.ah@airbus.com.

(f) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 30 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Martin R. Crane,

Aviation Safety Engineer, Regulations & Policy Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) Emergency AD No. 2017-0232-E, dated November 21, 2017. You may view the EASA AD on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2018-0177.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6420 Tail Rotor Head.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 64.00.43, Revision 0, dated November 21, 2017.

(ii) Reserved.

Note 1 to paragraph (j)(2): Airbus Helicopters EASB No. 64.00.43, Revision 0, dated November 21, 2017, is co-published as one document along with Airbus Helicopters EASB No. 64.00.21, Revision 0, dated November 21, 2017, which is not incorporated by reference.

(3) For Airbus Helicopters service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on February 26, 2018.

Lance T. Gant,

Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2018-04647 Filed: 3/8/2018 8:45 am; Publication Date: 3/9/2018]